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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,316	02/19/2004	Thomas J. Endres	S0465/283640	7621
23370                      7590                      04/07/2008				
JOHN S. PRATT, ESQ. KILPATRICK STOCKTON, LLP 1100 PEACHTREE STREET ATLANTA, GA 30309				
EXAMINER				
BAYARD, EMMANUEL				
ART UNIT		PAPER NUMBER		
2611				
MAIL DATE		DELIVERY MODE		
04/07/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/782,316

**Applicant(s)**

ENDRES ET AL.

**Examiner**

Emmanuel Bayard

**Art Unit**

2611

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

This is in response to amendment after final filed on 3/20/08 in which claims 1 and 3 are pending. The finality has been withdrawn and applicant's amendments have been fully considered and entered but they are moot based on the new ground of rejection.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Scarpa et al U.S. Patent No 5,673,293.

As per claim 1, Scarpa et al teaches in a wireless communications receiver having a timing recovery module (see figs.1 and elements 240, 340), carrier recovery module (see figs.1 and 4 elements 230, 330), automatic gain control module (see figs.1 and 4 elements 116 or 110), and equalization module (see figs.1 and 4 elements 252, 352), said communications receiver responsive to a received signal to form soft decision samples (see fig.3c) corresponding to said received signal and hard decision samples corresponding to said received signal (see fig.3c and col.7, lines 37-63), a method for jointly operating said timing recovery module, said carrier recovery module, said automatic gain control module, and said equalization module, said method comprising (see also figs.1-2 and 4-7): deriving control signals from said soft and hard decision samples, wherein the control signals comprise a candidate error term and a combining weight (see col.7, lines 37-67 and col.8, lines 1-10 and col.14, lines 38-67 ); and using said control signals to jointly determine operation of said timing recovery module, said carrier recovery module, said automatic gain control module, and said equalization module (see fig.4 element 301 or MTS and col.14, lines 38-67).

As per claim 3, Scarpa et al inherently teaches wherein the received signal comprises data, the method further comprising: adjusting a sampling phase and frequency of the data (see fig.3a elements 436, 450). Note a PLL (phase locked loop) is well known in the art to adjust phase and frequency of the incoming data therefore Scarpa inherently the claimed limitations.

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
4. Wang et al U.S. Patent No 7,158,567 B2 teaches method and apparatus for improved high-speed FEC.

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5. Sommer et al U.S. Patent No 6,240,133 B1 teaches high stability fast tracking adaptive equalizer.
6. Henriksson et al U.S. Patent No 6,754,293 B1 teaches method and circuit arrangement.
7. Shiue et al U.S. Patent No 6,816,548 B1 teaches HDTV channel equalizer.
8. Tsui et al U.S. Patent No 6,385,237 B1 teaches non-invasive digital cable test system.
9. Maalejet al U.S. Patent No 6,249,180 B1 teaches phase noise and additive noise.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571 272 3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tuesday, April 01, 2008

Emmanuel Bayard  
Primary Examiner  
Art Unit 2611

/Emmanuel Bayard/  
Primary Examiner, Art Unit 2611